

ABSTRACT OF THE DISCLOSURE

Disclosed is a method that utilizes optics to measure a hole depth in a workpiece. The method involves placing a light recording apparatus and a light source apparatus proximate a hole. Light is then emitted from the light source apparatus and is directed into the hole. This illumination of the hole allows an image of the side surface of the hole that is at the greatest distance from the light recording apparatus to be recorded. Then, the apparent diameter of the image is calculated. The apparent diameter of the image, in turn, is compared to the known diameter of the hole in order to calculate the distance between a reference datum in the light recording apparatus and the far side surface of the hole. Once this distance is determined, the hole depth is calculated by accounting for the distance between the reference datum and the workpiece surface.